

Consistent with the above, the Piedmont HSA's white and nonwhite fetal, neonatal, postneonatal, and total 0-4 mortality were all below average during 1978-82. Considering that rates of prematurity and illegitimacy were not below average in this area, reasons underlying the Piedmont advantage are unclear. It is noted, however, that the advantage involved some Piedmont counties far more than others and that the Piedmont's rank among HSAs worsened in 1982 when rates for very young Piedmont residents all rose—the white and nonwhite infant death rates by 12 and 64 percent respectively. (3)

### AFDC Children vs. Others

This aspect of the present study purports to assess, on a race-specific basis, the degree of association between poverty and childhood mortality. Lacking a more suitable indicator of poverty, participation in the Aid to Families with Dependent Children Program (including Medicaid, based on AFDC eligibility) is used as a surrogate because a registry of those children is available at the state level. A similar study in Maine (4) also used food stamp files, but in North Carolina, those are available only at the county level.

AFDC is a joint federal/state/local money-payment program for families with documented need. To qualify, a child must be deprived of parental support or care because of the death, continued absence from the home, or physical or mental incapacity of a parent and must live with a specified relative. The child's family

group must meet North Carolina's AFDC income and needs standards including restrictions on reserves such as bank accounts and property. If 16 or 17, the child must be a full-time student in high school or its equivalent or be registered for work. This program is administered through the North Carolina Division of Social Services and local departments of social services.

For this study, death certificates for 1,082 children 28 days through 17 years who died during FY 1982 were matched with AFDC and AFDC-Medicaid files to determine AFDC status at the time of death (see Acknowledgement). The AFDC caseload on January 20, 1982 was then used to determine AFDC death rates specific for age group, race, and underlying cause of death. Deaths under 28 days were not included because the short time between birth and death probably precluded the enrollment in AFDC of some eligible children.

The death rates of Table 5 reveal much higher mortality among AFDC children than among the non-AFDC population 28 days to 17 years of age. This is especially true for whites among whom AFDC death rates are generally 3 to 4 times the non-AFDC death rates with the widest differentials occurring among infants and older children. Moreover, white death rates are found to exceed nonwhite rates for AFDC children of all ages except 1-4. The white excess appears especially pronounced among AFDC children 15-17.

**Table 5**  
**FY 1982 AFDC Deaths<sup>1</sup> and Death Rates Showing Non-AFDC and Total Death Rates by Race and Age**  
**North Carolina Residents 28 Days to 17 years of Age**

Age	All Races				Whites				Nonwhites			
	AFDC Deaths	Death Rates AFDC <sup>2</sup>	Death Rates Non-AFDC <sup>3,4</sup>	Total <sup>4,5</sup>	AFDC Deaths	Death Rates AFDC <sup>2</sup>	Death Rates Non-AFDC <sup>3,4</sup>	Total <sup>4,5</sup>	AFDC Deaths	Death Rates AFDC <sup>2</sup>	Death Rates Non-AFDC <sup>3,4</sup>	Total <sup>4,5</sup>
All Ages 28 Days to 17 Years	172	152.3*	59.8	66.2	47	198.7*	57.3	60.2	125	140.0*	66.5	79.7
28 Days to 1 Year	70	1027.6*	389.7	443.0	19	1434.0*	335.6	361.5	51	929.5*	539.2	623.7
1-17	102	96.1*	42.8	46.4	28	125.4*	42.9	44.6	74	88.3*	42.5	50.6
1-4	42	135.7*	53.2	61.0	8	123.7	50.6	52.7	34	138.9*	60.3	79.1
5-9	17	52.9*	26.3	28.2	6	84.5	26.2	27.6	11	43.9	26.1	29.4
10-14	18	63.2*	28.4	30.5	5	81.6	27.3	28.3	13	58.2	31.4	35.6
15-17	25	172.1*	76.5	80.9	9	341.0*	80.8	83.9	16	134.6*	64.4	73.6

\*The difference between AFDC and non-AFDC death rates is more than twice the standard error of the difference between the two rates. Thus, the difference is statistically significant.

<sup>1</sup>Deaths to children enrolled in Aid to Families with Dependent Children Program. <sup>2</sup>Deaths per 100,000 AFDC children enrolled January 20, 1982. Deaths 28 days to one year are per 100,000 children under age one. <sup>3</sup>Deaths per 100,000 population on January 1, 1982 not enrolled in AFDC on January 20, 1982. Deaths 28 days to one year are per 100,000 neonatal survivors under one year less children under one year enrolled in AFDC on January 20, 1982. <sup>4</sup>Population estimates for 1981 and 1982 were averaged to obtain January 1, 1982 estimates, assuming the 1980 age distribution in order to estimate persons 15-17. <sup>5</sup>Deaths per 100,000 population. Deaths 28 days to one year are per 100,000 neonatal survivors under one year.